

3



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/029,598

DATE: 01/16/2002
TIME: 19:39:56

Input Set : A:\ISIS4945.ST25.txt
Output Set: N:\CRF3\01162002\J029598.raw

ENTERED

3 <110> APPLICANT: Teng, Ching-Leou
4 Cook, Phillip Dan
5 Tillman, Lloyd
6 Hardee, Gregory E.
7 Ecker, David J.
8 Manoharan, Muthiah
10 <120> TITLE OF INVENTION: Compositions And Methods For Non-Parental Delivery Of
Oligonucleotides
12 <130> FILE REFERENCE: ISIS4945
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/029,598
C--> 14 <141> CURRENT FILING DATE: 2001-12-21
14 <150> PRIOR APPLICATION NUMBER: 08/082,624
15 <151> PRIOR FILING DATE: 1998-05-21
17 <150> PRIOR APPLICATION NUMBER: 09/315,298
18 <151> PRIOR FILING DATE: 1999-05-20
20 <160> NUMBER OF SEQ ID NOS: 58
22 <170> SOFTWARE: PatentIn version 3.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 20
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Antisense Sequence
32 <220> FEATURE:
33 <221> NAME/KEY: misc_feature
34 <222> LOCATION: (1)..(20)
35 <223> OTHER INFORMATION: Phosphorothioate linkage
38 <400> SEQUENCE: 1
39 gcccaagctg gcatccgtca 20
42 <210> SEQ ID NO: 2
43 <211> LENGTH: 20
44 <212> TYPE: DNA
45 <213> ORGANISM: Artificial Sequence
47 <220> FEATURE:
48 <223> OTHER INFORMATION: Antisense Sequence
50 <220> FEATURE:
51 <221> NAME/KEY: misc_feature
52 <222> LOCATION: (1)..(20)
53 <223> OTHER INFORMATION: Phosphorothioate linkage
56 <400> SEQUENCE: 2
57 cccccaccac ttccctctc 20
60 <210> SEQ ID NO: 3
61 <211> LENGTH: 21
62 <212> TYPE: DNA

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/029,598

DATE: 01/16/2002
TIME: 19:39:56

Input Set : A:\ISIS4945.ST25.txt
Output Set: N:\CRF3\01162002\J029598.raw

```
63 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: Antisense Sequence
68 <400> SEQUENCE: 3
69 agccatagcg aggctgaggt t 21
72 <210> SEQ ID NO: 4
73 <211> LENGTH: 20
74 <212> TYPE: DNA
75 <213> ORGANISM: Artificial Sequence
77 <220> FEATURE:
78 <223> OTHER INFORMATION: Antisense Sequence
80 <400> SEQUENCE: 4
81 aacatctccg taccatgccca 20
84 <210> SEQ ID NO: 5
85 <211> LENGTH: 21
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial Sequence
89 <220> FEATURE:
90 <223> OTHER INFORMATION: Antisense Sequence
92 <400> SEQUENCE: 5
93 cccaggcatt ttaagttgct g 21
96 <210> SEQ ID NO: 6
97 <211> LENGTH: 21
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Antisense Sequence
104 <400> SEQUENCE: 6
105 gtttaaggca gcatcctaag a 21
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 21
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Antisense Sequence
116 <400> SEQUENCE: 7
117 tcacccaaag gtttaggctt g 21
120 <210> SEQ ID NO: 8
121 <211> LENGTH: 21
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Antisense Sequence
128 <400> SEQUENCE: 8
129 gcaatcatga cttcaagagt t 21
132 <210> SEQ ID NO: 9
133 <211> LENGTH: 18
134 <212> TYPE: DNA
135 <213> ORGANISM: Artificial Sequence
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/029,598

DATE: 01/16/2002
TIME: 19:39:56

Input Set : A:\ISIS4945.ST25.txt
Output Set: N:\CRF3\01162002\J029598.raw

```

137 <220> FEATURE:
138 <223> OTHER INFORMATION: Antisense Sequence
140 <400> SEQUENCE: 9
141 gtgccggggt cttcgggc 18
144 <210> SEQ ID NO: 10
145 <211> LENGTH: 19
146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Antisense Sequence
152 <400> SEQUENCE: 10
153 catggtttcg gagggcgtc 19
156 <210> SEQ ID NO: 11
157 <211> LENGTH: 20
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Antisense Sequence
164 <400> SEQUENCE: 11
165 tcgcgctccc tctctccggc 20
168 <210> SEQ ID NO: 12
169 <211> LENGTH: 20
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Antisense Sequence
176 <400> SEQUENCE: 12
177 caccgaagag agcagaaagt 20
180 <210> SEQ ID NO: 13
181 <211> LENGTH: 20
182 <212> TYPE: DNA
183 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: Antisense Sequence
188 <400> SEQUENCE: 13
189 cccttctac cgcgtgcgac 20
192 <210> SEQ ID NO: 14
193 <211> LENGTH: 20
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: Antisense Sequence
200 <400> SEQUENCE: 14
201 cctccgaccc atccacgtag 20
204 <210> SEQ ID NO: 15
205 <211> LENGTH: 20
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/029,598

DATE: 01/16/2002
TIME: 19:39:56

Input Set : A:\ISIS4945.ST25.txt
Output Set: N:\CRF3\01162002\J029598.raw

```

210 <223> OTHER INFORMATION: Antisense Sequence
212 <400> SEQUENCE: 15
213 gttgacgtcc tacggaaca                                20
216 <210> SEQ ID NO: 16
217 <211> LENGTH: 20
218 <212> TYPE: DNA
219 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Antisense Sequence
224 <220> FEATURE:
225 <221> NAME/KEY: misc_feature
226 <222> LOCATION: (1)..(20)
227 <223> OTHER INFORMATION: Phosphorothioate linkage
230 <400> SEQUENCE: 16
231 tccgtcatcg ctcctcaggg                                20
234 <210> SEQ ID NO: 17
235 <211> LENGTH: 20
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Antisense Sequence
242 <400> SEQUENCE: 17
243 tgctgttcgt gccccgcgcg                                20
246 <210> SEQ ID NO: 18
247 <211> LENGTH: 20
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: Antisense Sequence
254 <400> SEQUENCE: 18
255 ctaaggcaca aggcgggctg                                20
258 <210> SEQ ID NO: 19
259 <211> LENGTH: 20
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Antisense Sequence
266 <220> FEATURE:
267 <221> NAME/KEY: misc_feature
268 <222> LOCATION: (1)..(20)
269 <223> OTHER INFORMATION: Phosphorothioate linkage
272 <400> SEQUENCE: 19
273 tcccgccctgt gacatgcatt                                20
276 <210> SEQ ID NO: 20
277 <211> LENGTH: 25
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Antisense Sequence

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/029,598

DATE: 01/16/2002
 TIME: 19:39:56

Input Set : A:\ISIS4945.ST25.txt
 Output Set: N:\CRF3\01162002\J029598.raw

```

284 <400> SEQUENCE: 20
285 cctctctgtt taaaacttta tccat 25
288 <210> SEQ ID NO: 21
289 <211> LENGTH: 21
290 <212> TYPE: DNA
291 <213> ORGANISM: Artificial Sequence
293 <220> FEATURE:
294 <223> OTHER INFORMATION: Antisense Sequence
296 <400> SEQUENCE: 21
297 ttcataatcct gagtcagtgc g 21
300 <210> SEQ ID NO: 22
301 <211> LENGTH: 18
302 <212> TYPE: RNA
303 <213> ORGANISM: Artificial Sequence
305 <220> FEATURE:
306 <223> OTHER INFORMATION: Antisense Sequence
308 <400> SEQUENCE: 22
309 gcuaauaccu uaacccag 18
312 <210> SEQ ID NO: 23
313 <211> LENGTH: 17
314 <212> TYPE: RNA
315 <213> ORGANISM: Artificial Sequence
317 <220> FEATURE:
318 <223> OTHER INFORMATION: Antisense Sequence
320 <400> SEQUENCE: 23
321 cauuauugcc cugaaag 17
324 <210> SEQ ID NO: 24
325 <211> LENGTH: 21
326 <212> TYPE: DNA
327 <213> ORGANISM: Artificial Sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Antisense Sequence
332 <400> SEQUENCE: 24
333 taaaaagaat atgatcttca t 21
336 <210> SEQ ID NO: 25
337 <211> LENGTH: 18
338 <212> TYPE: DNA
339 <213> ORGANISM: Artificial Sequence
341 <220> FEATURE:
342 <223> OTHER INFORMATION: Antisense Sequence
344 <400> SEQUENCE: 25
345 agcaactgag ccacctga 18
348 <210> SEQ ID NO: 26
349 <211> LENGTH: 21
350 <212> TYPE: DNA
351 <213> ORGANISM: Artificial Sequence
353 <220> FEATURE:
354 <223> OTHER INFORMATION: Antisense Sequence
356 <400> SEQUENCE: 26

```

VERIFICATION SUMMARY

DATE: 01/16/2002

PATENT APPLICATION: US/10/029,598

TIME: 19:39:57

Input Set : A:\ISIS4945.ST25.txt

Output Set: N:\CRF3\01162002\J029598.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date